



Volume 90, Issue 12

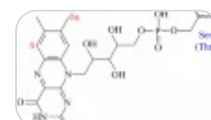
December 2025



Mitochondria at the Crossroads of Life and Death. Special Issue in Memory of Vladimir P. Skulachev. Guest Editor: Boris V. Chernyak

17 articles in this issue

Microbial 2-Enoate Reductases Containing Covalently Bound Flavin Mononucleotide



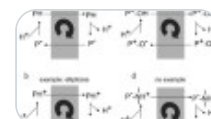
REVIEW | 23 December 2025 | Pages: 1775 - 1788

Ca²⁺-Dependent Mitochondrial Permeability Transition Pore: Structure, Properties, and Role in Cellular Pathophysiology



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Classification of Mitochondrial Protonophoric Uncouplers and their Modifications in Biological Environment



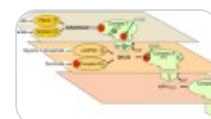
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Turnover and Quality Control of Mitochondrial DNA



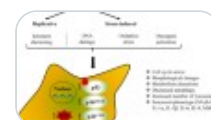
REVIEW | 23 December 2025 | Pages: 1849 - 1861

Suppressing Mitochondrial ROS Production is Beneficial in Multiple Preclinical Models of Human Disease



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Antibiotics and Cellular Senescence: An Unexplored Territory



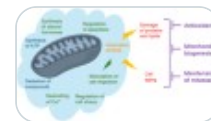
REVIEW | Open access | 23 December 2025 | Pages: 1883 - 1896

Current Challenges and Future Directions in Mitochondrial Potassium Transport Research



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From Cellular Architecture to Regulation of Mitochondrial Function: Role of Vimentin in Ensuring Cellular Mitostasis



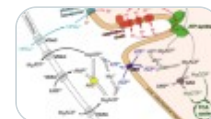
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Mechanisms of Intracellular Selection of Mitochondrial DNA



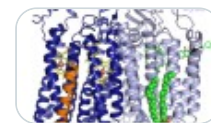
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ATP in Mitochondria: Quantitative Measurement, Regulation, and Physiological Role



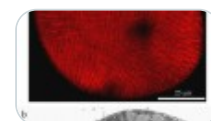
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Examination of the Reaction of *Escherichia coli* Cytochrome *bd-I* in the Fully Reduced State with Cyanide Using Absorption and Circular Dichroism Spectroscopy



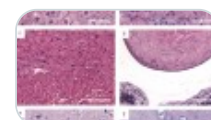
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Mitochondrial Reticulum in Skeletal Muscles: Proven and Hypothetical Functions



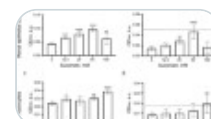
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Progeroid Syndrome with Signs of Autophagy Dysfunction in the Naked Mole Rat (*Heterocephalus glaber*)



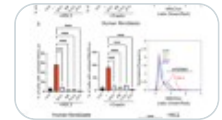
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Succinate Confers Stronger Cytoprotection in Kidney Cells than in Astrocytes Due to Its More Efficient Involvement in Energy Metabolism



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Mitochondrial Lipid Peroxidation Initiates Rapid Accumulation of Lipofuscin in Cultured Cells



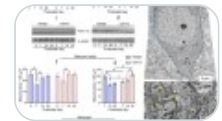
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Mechanisms and Ways to Overcome Acquired Resistance of Cancer Cells to Mcl-1 Antagonists



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Mitochondria in Developing Brain: Contribution of Deviations to Higher Susceptibility to Neurodegeneration in Latter Periods of Life



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